SERVICE MANUAL FOR COMPUTERIZED SEWING MACHINE

BLCC

□ Since the BLCC is a model derived from the "BLDC," only the parts differing from the "BLDC" will be noted.

□ The following are the points of difference between the BLCC and the "BLDC."

- The BLCC uses dedicated parts for the operation panel.
- The BLCC uses dedicated parts for the main PCB.
- There is no LCD panel. A seven segment LED is installed on the operation PCB assembly.
- There is no "knee lifter" mechanism.
- There is no "thread cutter" mechanism.

□ For other parts, see the "BLDC" SERVICE MANUAL.

4.2003.

GENERAL INFORMATION

This service manual has been compiled for explaining repair procedures of this MODEL.
This was produced based on up-to-date product specifications at the time of issue, but there may have been changes of specifications for the purpose of improvements.
Contact manufacturer or local sales company for information concerning such changes.

CAUTION

1. Always use rubber gloves when handling printed circuit boards and never touch the metal portion of a printed circuit board with bare hands.
2. Keep your body earthed in order to avoid generating static electricity.
3. Pack printed circuit boards in aluminum foil and avoid subjecting them to any form of impact during storage or transportation.
4. Do not touch or damage the metal portion of a printed circuit board with a screwdriver or any other tool while making repairs or the like.

CONTENTS

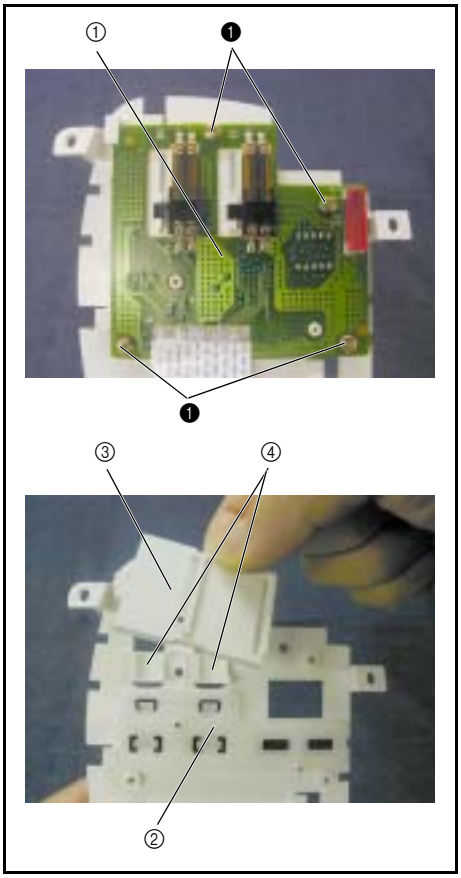
2.Disassembly **2-1**
Main parts
Front cover disassembly (operation PCB assy disassembly) 2-2
Needle-presser module
Presser foot lifter removal 2-3
3.Assembly **3-1**
Main parts
Front cover assembly (assembling the operation PCB holder) 3-2
Needle-presser module
Presser foot lifter attachment 3-3
4.Ajustment **4-1**
Test Mode 4-2

2 Disassembly

2-6

8 Front cover disassembly (operation PCB assy disassembly)

1. **Remove the screws ❶ (four) and remove the operation PCB assembly ①, rubber keys ②, key top rear plate ③ and VR key tops ④ (two).**



2-37

22 Presser foot lifter removal

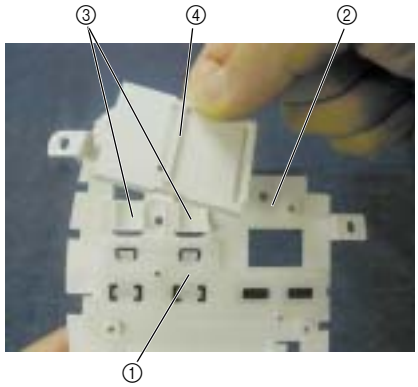
1. **Remove retaining ring E4.**
2. **Remove the presser lift shaft ①, presser foot lifter ②. and washers (two).**
3. **Remove retaining ring E4 from the presser lift shaft ①.**

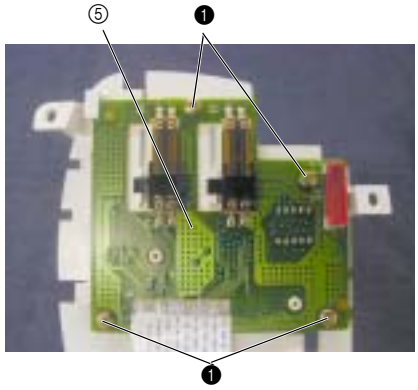
3 Assembly

3-35

9 Front cover assembly (assembling the operation PCB holder)

1. **Attach the rubber keys ① to the operation PCB holder ②.**
2. **Attach the VR key tops ③ (two) and key top rear plate ④ to the operation PCB holder ②.**
   - **Attach the operation F0 PCB assy. ⑤ using the screw ❶ (four).**





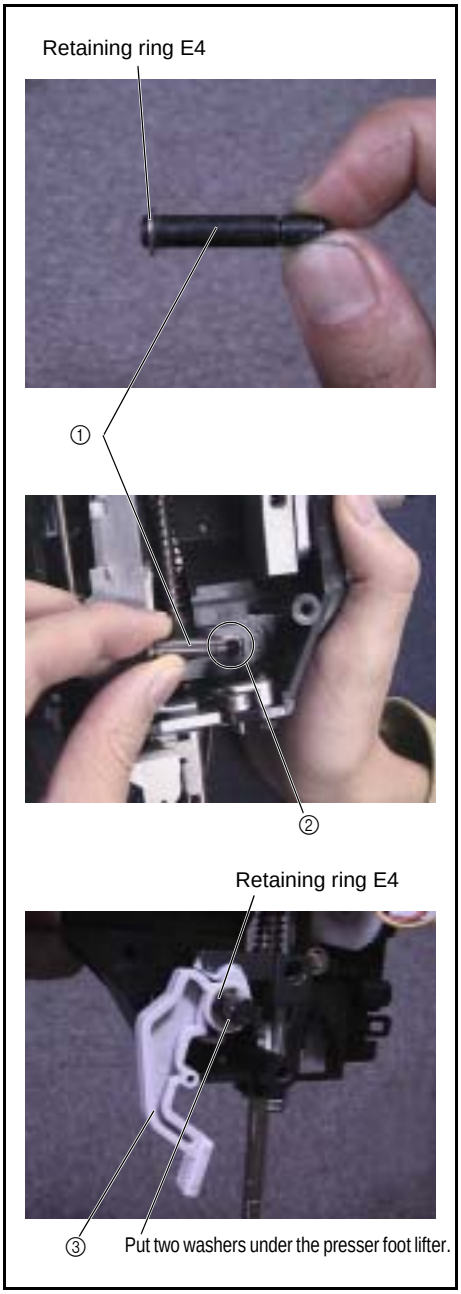
❶		Taptite, Bind B M3X8 Color; Gold	Torque 0.57 – 0.78 N·m

3-46

13 Presser foot lifter attachment

1. **Attach retaining ring E4 to the presser lift shaft ①.**
2. **Apply a small amount of Molykote EM30L to the presser lift shaft ①.**
3. **Insert the presser lift shaft ① into the hole ② in the thread releaser assy. and attach the washers (two). and presser foot lifter ③.**
4. **Attach retaining ring E4 to the presser lift shaft ①.**

Apply Molykote EM30L grease to the operating surface of the presser lifter shaft presser foot lifter.	Small amount
Apply Molykote EM30L grease to the operating surface of the presser foot lifter presser bar clamp	Small amount

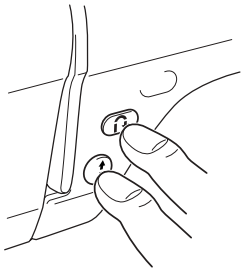


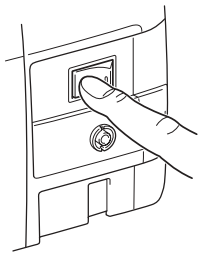
4 Adjustment

Starting test mode

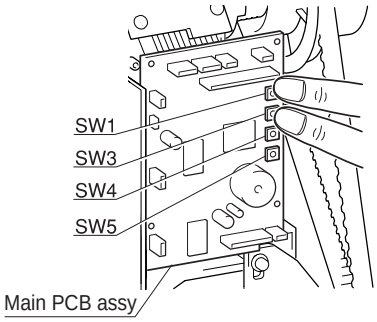
- **With the front cover in place**

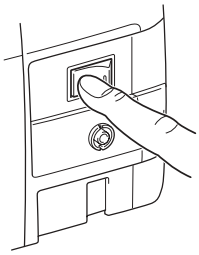
  Press ↑ and ↓ while turning the power on; the buzzer will sound four times, and test mode will start.





- **Without the front cover in place**
  Press SW1 and SW3 on the main PCB assy. while turning the power on; the buzzer will sound four times, and test mode will start.





Mode Selection

- **Select the mode using ▲.**
  (When changing the mode without the front cover in place, turn the power off and restart the test mode.)

Starting and stopping operation

- **With the front cover in place**

  Press the ↑ switch.

- **Without the front cover in place**
  Press SW1

Test Modes

Mode	Mode selection button		Z (zigzag) operations	F (feed) operations	Operating speed
3 point needle drop	With front cover in place	Press ▲ twice, select 02.	Switches left base line / center base line / right base line with each stitch *Pressing ↓ / SW5 stops the base line from changing	0 mm (none)	Any speed may be selected using the speed control key
	Without front cover in place	SW5			Switches low / middle / high speed with each push of SW3.
Feed forward and reverse	With front cover in place	Press ▲ five times, select 05.	100 stitches forward on the left base line 100 stitches reverse on the right baseline		Switches low / middle / high speed with each push of the ↓.
	Without front cover in place	SW3			Switches low / middle / high speed with each push of SW5.

BLCC

BLCC
15C03HF882S60